Claims

1. In a heat exchanger having a tube with an interior passageway and a wall surrounding said passageway, wherein the improvement comprises a pair of dimples projecting from said wall into said passageway, said dimples being in generally facing relationship, but being offset from each other along a longitudinal axis of said tube.

2. The heat exchanger of claim 1 wherein said dimples are extruded into said passageway by deforming said wall inwardly.

3. The heat exchanger of claim 1 further including a plurality of pairs of dimples projecting from said wall into said passageway at respective selected locations along said longitudinal axis, the dimples of each pair being in generally facing relationship, but being offset from each other along said longitudinal axis.

4. The heat exchanger of claim 1 wherein each of said dimples defines a convex surface in said passageway.

5. The heat exchanger of claim 1 wherein at least one dimple projects into said passageway a distance greater than one-half of a minor dimension of said tube, said minor dimension being measured along an axis transverse to said longitudinal axis.

6. The heat exchanger of claim 1 wherein said dimples are offset from each other along said longitudinal axis by an amount not greater than one-half of a length of each of said dimples along said longitudinal axis.

7. The heat exchanger of claim 1 wherein respective portions of said dimples are in contact within said passageway.

8. The heat exchanger of claim 1 wherein said tube is generally U-shaped and has first and second leg portions with a return bend portion intermediate said first and second leg portions, said first leg portion extending between an inlet end of said tube and said return bend portion, said second leg portion extending between said return bend portion, said dimples being located in said second leg portion.

9. A heat exchanger tube having an interior passageway, a wall surrounding said passageway and a pair of dimples projecting from said wall into said passageway , said dimples being in generally facing relationship, but being offset from each other along a longitudinal axis of said tube.

10. The tube of claim 9 wherein said dimples are extruded into said passageway by deforming said wall inwardly.

11. The tube of claim 9 further including a plurality of pairs of dimples projecting from said wall into said passageway at respective selected locations along said longitudinal axis, the dimples of each pair being in generally facing relationship, but being offset from each other along said longitudinal axis.

12. The tube of claim 9 wherein each of said dimples defines a convex surface in said passageway.

13. The tube of claim 9 wherein at least one of said dimples projects into said passageway beyond a central longitudinal axis of said tube.

14. The tube of claim 9 wherein said dimples are offset from each other along said longitudinal axis by an amount not greater than one-half of a length of each of said dimples along said longitudinal axis.

15. The tube of claim 9 wherein said dimples are in contact with each other within said passageway.

16. The tube of claim 9 wherein said tube is generally U-shaped and has first and second leg portions and a return bend portion that is intermediate said first and second leg portions, said first leg portion extending between an inlet end of said tube and said return bend portion, said second leg portion extending between said return bend portion, said dimples being located in said second leg portion.

17. In a furnace having a heat exchanger with at least one tube adapted to receive products of combustion, said at least one tube having an interior passageway and a wall surrounding said passageway, wherein the improvement comprises a pair of dimples projecting from said wall into said passageway, said dimples being in generally facing relationship, but being offset from each other along a longitudinal axis of said tube.

18. The furnace of claim 17 further including a plurality of pairs of dimples projecting from said at least one wall into said passageway at respective selected locations along said longitudinal axis, the dimples of each pair being in generally facing relationship, but being offset from each other along said longitudinal axis.

19. The furnace of claim 17 wherein at least one dimple projects into said passageway beyond a central longitudinal axis of said tube.

20. The furnace of claim 19 wherein both of the dimples of said pair project into said passageway beyond said central longitudinal axis.

21. The furnace of claim 17 wherein said dimples are offset from each other along said longitudinal axis by an amount not greater than one-half of a length of each of said dimples along said longitudinal axis.

22. The furnace of claim 17 wherein at least respective portions of said dimples are in contact with each other within said passageway.